

|                   |                      |                      |
|-------------------|----------------------|----------------------|
| FLT ID: 250719H   | FM: KBNA             | TO: KBNA             |
| FLT NO: 95-031    | BLK IN: 1729         | ATA: 1724Z           |
| ETD: 1100Z        | BLK OUT: 1119Z       | RTD: 1133Z           |
| ETE: 6+15         | BLK TIME: 6+10 (6.2) | FLT TIME: 5+51 (5.8) |
| SPONSOR ORG: NOAA | PROGRAM: Ozone '95   | PURPOSE: FLT # 18    |

ORO PERSONNEL

|                  |                   |
|------------------|-------------------|
| AC PHILIPSBORN ✓ | SYS ENG ZARR ✓    |
| CP O'MARA ✓      | DATA SYS FRASAS ✓ |
| NAV RAYBURN ✓    | RADAR             |
| FE TORREY ✓      | BT/ODW            |
| RADIO            | CLD PHYS          |
| FD BOGGERT ✓     | DOPPLER           |

PARTICIPATING SCIENTIST/VISITORS/ORO

| LAST, FIRST NAME   | ACTIVITY ON A/C | AFFILIATION  |
|--------------------|-----------------|--------------|
| Libler             | P.I.            | CU/CRES/NOAA |
| SHERIDAN           |                 |              |
| Ryerson            |                 |              |
| Kuster             |                 |              |
| Williams - Lee     |                 |              |
| Holloway - Johnson |                 |              |
| TRAWER             | P.I.            |              |
| Imhoff             | 17 S.O.B.       | TVA Science  |

PROPOSED/ACTUAL MISSION/REMARKS (RECCO, FIXES, STORM, PENET, NHOP #)

QNH - 3001 / 1016 mbs  
 PS - 995.3 mbs  
 SP - 993.5

QNH - 3003 /  
 PS - 995.5  
 SP - 995.1

## U.S. DEPT. COMM./NOAA/ORA - DATA SECTION WORK FORM NO. 2 OROWF2 FILE

FLT ID: 950719H TIME OFF: 1133 2 TIME ON: 1724Z

|          |         |        |          |        |
|----------|---------|--------|----------|--------|
|          | A/C T/O | WX STN | A/C LAND | WX STN |
| PRESSURE |         |        |          |        |

NO DATA DISPOSITION/DATE/QUALITY

|                     |              |  |
|---------------------|--------------|--|
| 1/SEC FLT LVL TAPES | 1            |  |
| FAST FLT LVL TAPES  | <del>0</del> |  |
| RADAR TAPES         | 1            |  |
| DOPPLER TAPES       | <del>0</del> |  |
| ODW CASSETTES       | <del>0</del> |  |
| HARD COPIES         | <del>0</del> |  |
| PMS DAT             | 1            |  |
| AXBT                | <del>0</del> |  |
| AXCP                | <del>0</del> |  |
| ODW                 | <del>0</del> |  |

## PHOTOGRAPHY

|      |     |    |    |      |
|------|-----|----|----|------|
|      | FWD | LS | RS | VERT |
| ON   | ✓   | ✓  | ✓  | ✓    |
| OFF  | ✓   | ✓  | ✓  | ✓    |
| RATE |     |    |    |      |

REMARKS

950719HI

| Time           | Lat                        | Long | TRK | Wd | Ws  | Ta  | Td  | PA   | CA   | SP  | PS  | PQ                  |
|----------------|----------------------------|------|-----|----|-----|-----|-----|------|------|-----|-----|---------------------|
|                | @ 8K MSL                   |      |     |    |     |     |     |      |      |     |     |                     |
| 1208Z          | @ 5K MSL                   |      |     |    |     |     |     |      |      |     |     |                     |
| 1224Z          | @ 2K AGL PND 1235Z         |      |     |    |     |     |     |      |      |     |     |                     |
| 1237Z          | @ 1.3K AGL                 |      |     |    |     |     |     |      |      |     |     |                     |
| 124930Z        | @ 0.6 AGL E. BND PND 1255Z |      |     |    |     |     |     |      |      |     |     |                     |
| 1326Z          | @ 1.3 AGL 1340Z @ 2K AGL   |      |     |    |     |     |     |      |      |     |     |                     |
| 1328Z (W. BND) |                            |      |     |    |     |     |     |      |      |     |     |                     |
| 1340Z          | 35                         | 34   | 87  | 35 | 090 | 034 | 9.4 | 20.3 | 12.1 | 872 | 699 | 985 923 72.4        |
| 1352Z          | @ 0.6K AGL                 |      |     |    |     |     |     |      |      |     |     |                     |
| 1438Z          | @ 1.6K AGL                 |      |     |    |     |     |     |      |      |     |     |                     |
| 1439Z          | 36                         | 26   | 87  | 24 | 067 | 307 | 4.2 | 22.8 | 12.8 | 610 | 490 | 998 942 81.4 (1.6K) |
| 1451Z          | @ 1.6 AGL PND 150430Z      |      |     |    |     |     |     |      |      |     |     |                     |
| 150545Z        | @ 1.5* MSL 1522Z @ 2K MSL  |      |     |    |     |     |     |      |      |     |     |                     |
| 1536           | @ 3.0 K MSL                |      |     |    |     |     |     |      |      |     |     |                     |
| 1546           | 35                         | 44   | 87  | 30 | 181 | 038 | 7.4 | 20.1 | 12.5 | 807 | 784 | 994 910 81.5        |
| 1552Z          | @ 6K MSL                   |      |     |    |     |     |     |      |      |     |     |                     |
| 161245Z        | @ 15K MSL FOR CAL'S        |      |     |    |     |     |     |      |      |     |     |                     |
| 1649Z          | @ 1K AGL                   |      |     |    |     |     |     |      |      |     |     |                     |

1719Z

PND

SIP  
CNC

# OZONE-95

FLIGHT #18 950719H EARLY MORNING FLIGHT.

## TYPE OF DATA

## SENSOR OR OPTION

|                                                |                    |
|------------------------------------------------|--------------------|
| INE                                            | 1                  |
| Accelerometer                                  | 1                  |
| Temperature probe                              | 1                  |
| Altitude change option<br>(for vertical winds) | PA                 |
| Static pressure                                | Rosemount fuselage |
| Dynamic pressure                               | Rosemount fuselage |
| Time source                                    | Micro 29           |
| Constants file                                 | CO2951.CON         |

## Notes:

There were no data/time gaps:

INE#1 was utilized on this flight and was renavigated using 09 GPS positions for renav.

SPECIAL NOTE!!! Locations 80, 81 and 82 of record five on the standard tape contain vertical ground, vertical air and vertical speeds, respectively, computed using Dave Jorgensen's vertical wind algorithm.

|                          |          |          |
|--------------------------|----------|----------|
|                          | Take off | Landing  |
|                          | -----    | -----    |
| Aircraft static pressure | 995.3mb  | 995.5mb  |
| Corrected tower pressure | 1016.0mb | 1016.5mb |

Flight Meteorologist: Philip D. Bogert, (813) 828-3310 X3072

INE # 1

950719N

① 114300z 3545.7 ±0  
8659.4 -0.1

② 121500z 3525.4 -0.2  
8807.2 ±0

③ 125800z 3525.0 +0.1  
8811.9 ±0

④ 133100z 3531.6 +0.4  
8648.8 +1.0

⑤ 142000z 3622.8 +0.5  
8725.0 +0.6

⑥ 144100z 3625.3 +0.9  
8709.2 +1.5

⑦ 153900z 3611.6 +1.2  
8729.7 +0.3 +0.8  
+0.3

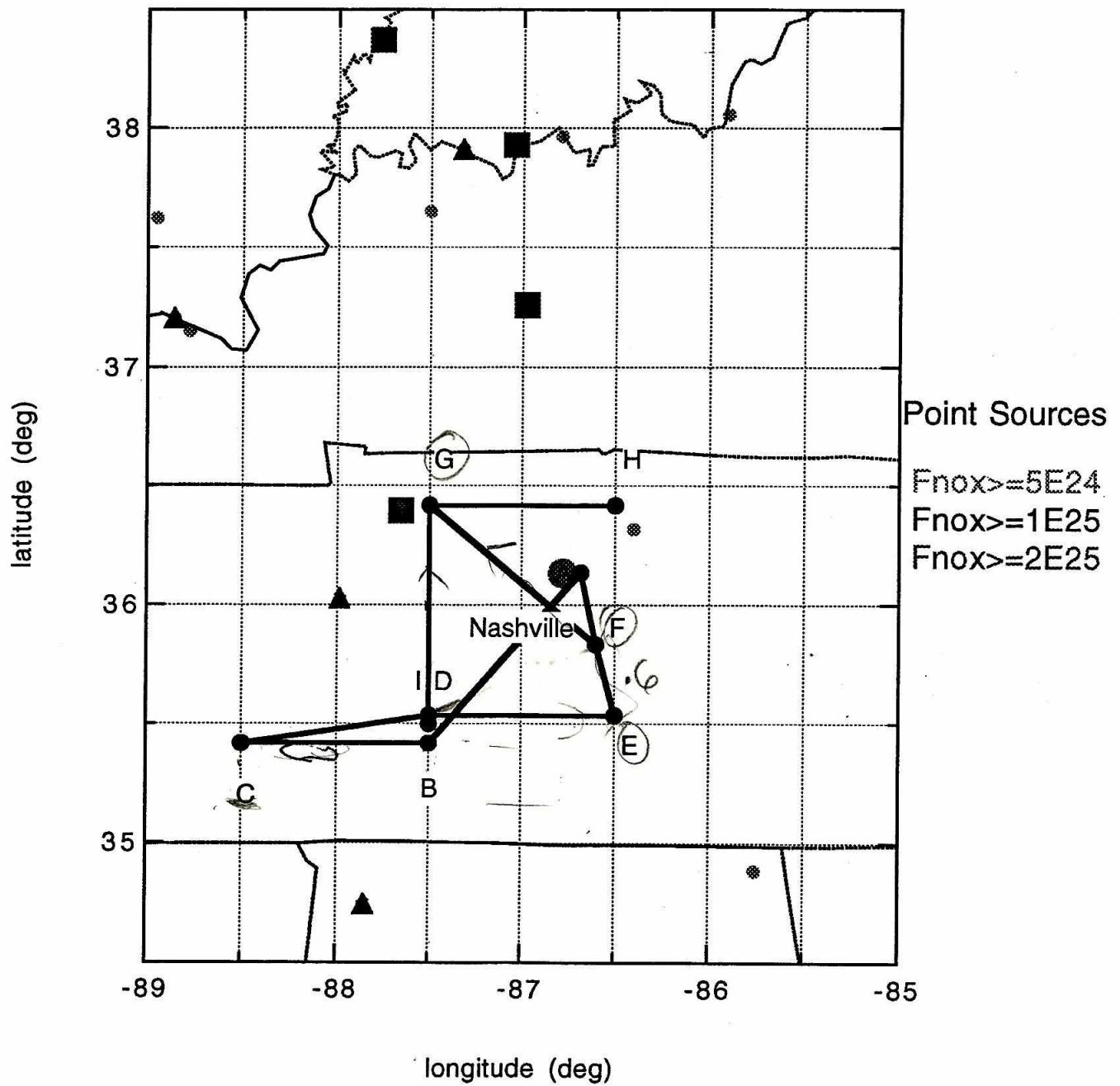
⑧ 161300z 3600.3 +2.3  
8728.1 +1.8

⑨ 171900z 3549.6 +2.5  
8638.1 +0.5

⑩ 172400z 3604.1 +2.9  
8640.1 +0.8

Holo 16TV

Flight Plan for 7/19/95, Takeoff 6:00 CDT



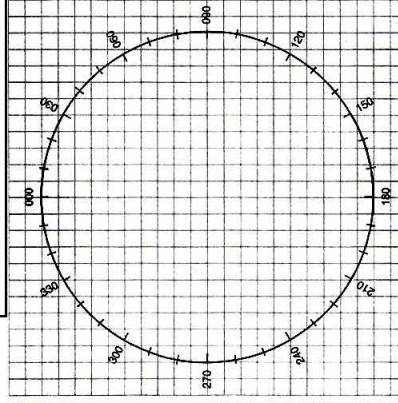
## **Investigator Crew for Flight #19 (July 19, 1995)**

|                                                        |                                              |            |
|--------------------------------------------------------|----------------------------------------------|------------|
| Aerosols                                               | Pat Sheridan                                 |            |
| NO/NO <sub>x</sub> /NO <sub>y</sub> /NO <sub>y</sub> * | Tom Ryerson                                  |            |
| HC/GC                                                  | Bill Kuster                                  | NOAA staff |
| Radon                                                  | -                                            |            |
| PAN                                                    | Jonathan Williams                            |            |
| Carbonyls                                              | Yin-Nan Lee                                  |            |
| SO <sub>2</sub> , CO, O <sub>3</sub>                   | John Holloway                                |            |
| H <sub>2</sub> O <sub>2</sub>                          | Tom Jobson                                   |            |
| Datasystems                                            |                                              |            |
| Ops                                                    | Gerd Hübler<br>Michael Trainer<br>Bob Imhoff |            |
| <b>Total</b>                                           | <b>10 seats</b>                              |            |

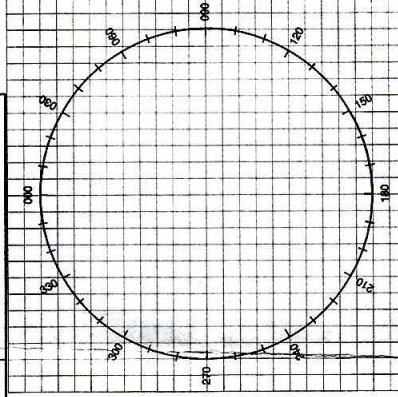
## CLEARANCES

[illegible]

# MISSION LOG



## PAGE OF



# POSITION REPORT

1. POSITION
2. TIME
3. ALTITUDE
4. NEXT POSITION
5. ETA
6. NEXT POSITION

**EMERGENCY MESSAGE**

TRANSMIT THE FOLLOWING MESSAGE TO ANY AGENCY ON THE AIR-GROUND FREQUENCY IN USE. IF UNABLE TO ESTABLISH COMMS, ATTEMPT CONTACT ON ANY OF THE FOLLOWING EMERGENCY FREQUENCIES:

| UHF/VOICE | VHF/VOICE | MF/VOICE | HF/CW    | MF/CW   |
|-----------|-----------|----------|----------|---------|
| 243.0     | 121.5     | 2182 KHZ | 8364 KHZ | 500 KHZ |

**MAYDAY, MAYDAY, MAYDAY  
THIS IS NOAA . NOAA**

- POSITION \_\_\_\_\_ N/S \_\_\_\_\_ E/W AT \_\_\_\_\_

- HEADING \_\_\_\_\_ TRUE/MAG \_\_\_\_\_  
- AT \_\_\_\_\_ KTS TRUE/INDICATED \_\_\_\_\_

- FLIGHT LEVEL OR ALTITUDE \_\_\_\_\_
- WE ARE A P-3 AIRCRAFT WITH \_\_\_\_\_

- NATURE OF EMERGENCY
- ASSISTANCE DESIRED

- PILOT INTENTIONS
- WE HAVE

[illegible]